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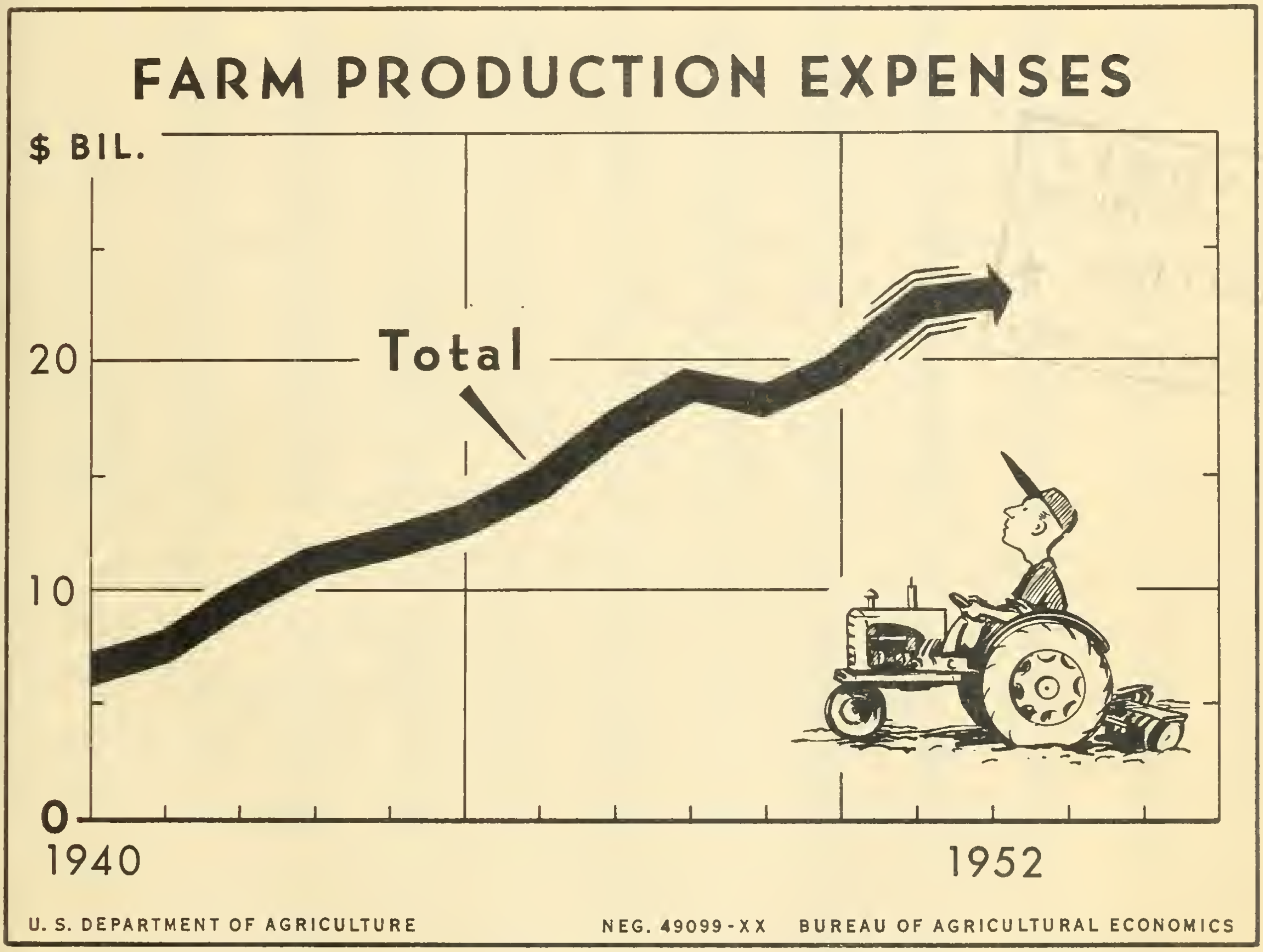
F222

THE Farm Cost SITUATION

FOR RELEASE APR. 13, P. M.

BUREAU OF AGRICULTURAL ECONOMICS
UNITED STATES DEPARTMENT OF AGRICULTURE

FCS-14 BAE MARCH 1953



FARM PRODUCTION EXPENSES

U. S. DEPARTMENT OF AGRICULTURE NEG. 49099-XX BUREAU OF AGRICULTURAL ECONOMICS

Farm production expenses advanced rapidly from around 5.8 billion dollars in 1938 to about 18.9 billion in 1948. They declined slightly in 1949 primarily because of a drop in prices paid for feed grains. Largely as a result of the Korean war production expenses advanced rapidly after 1949, and were a record high–approximately 23 billion–in 1952; nearly 3½ times those in 1940. They probably will average slightly lower in 1953.

Goods and services used in production: Prices paid by farmers and farm wage rates, United States

(Index numbers 1935-39 = 100)

Year	Commodities, interest, taxes and wage rates	Commodities only	Feed	Live-stock	Motor supplies	Motor vehicles	Farm machinery	Farm supplies	Building and fencing materials	Ferti-lizer	Seed	Wage rates 1/
1910	75	78	93	74	---	---	65	69	69	96	78	79
1911	77	79	94	69	---	---	65	71	71	96	90	81
1912	81	82	98	77	---	---	65	71	71	98	98	83
1913	81	81	92	90	---	---	65	73	70	99	81	86
1914	83	82	97	93	---	---	65	73	64	100	75	83
1915	84	84	96	92	---	---	67	78	70	106	75	83
1916	93	93	104	100	---	---	71	86	81	121	104	93
1917	121	126	167	128	---	---	80	115	94	133	138	117
1918	140	145	178	146	---	---	101	149	111	169	149	146
1919	153	157	198	148	---	---	105	157	130	178	170	170
1920	162	157	198	130	---	---	108	156	141	177	202	199
1921	118	103	100	71	---	---	105	135	108	149	104	129
1922	119	102	108	87	---	---	93	116	110	125	100	127
1923	128	111	129	90	---	---	97	120	110	131	105	142
1924	129	113	132	94	125	88	101	125	111	124	107	150
1925	131	117	136	100	133	89	101	124	113	136	122	150
1926	128	114	116	106	138	87	101	125	112	135	142	151
1927	129	114	122	119	123	89	101	122	110	118	125	152
1928	132	119	132	146	120	90	101	123	109	128	111	152
1929	132	118	130	143	119	92	100	122	110	127	113	154
1930	124	109	116	106	113	89	99	120	107	124	110	146
1931	106	91	82	74	96	89	98	111	95	112	88	115
1932	92	80	61	61	95	88	93	98	87	98	57	86
1933	87	80	70	56	93	87	90	91	90	91	61	73
1934	94	92	98	56	99	92	94	96	101	103	88	82
1935	98	98	101	94	99	93	97	96	99	102	105	88
1936	99	99	104	90	100	97	98	97	98	97	93	94
1937	106	107	118	102	102	101	100	102	102	101	130	107
1938	100	98	89	101	101	107	103	104	101	100	94	107
1939	98	98	88	113	98	102	102	101	100	100	78	105
1940	100	99	95	115	96	101	100	104	101	96	86	107
1941	106	105	103	130	99	107	101	111	108	96	82	125
1942	122	119	126	152	106	116	107	123	118	107	111	163
1943	138	132	149	173	109	121	111	137	123	114	139	217
1944	148	140	165	163	111	131	114	144	131	116	158	263
1945	155	142	164	178	111	135	115	146	134	118	162	297
1946	168	154	190	202	113	139	119	147	146	119	167	320
1947	191	181	225	252	124	161	135	159	191	131	192	346
1948	211	202	238	312	138	181	157	169	212	143	223	365
1949	203	192	196	277	140	199	176	176	210	147	202	354
1950	209	198	200	324	143	199	180	176	215	141	193	351
1951	231	220	225	395	150	212	194	189	239	149	197	388
1952	237	221	239	331	151	222	201	200	240	153	223	416
Jan.	238	224	242	370	---	219	---	---	---	---	---	412
Feb.	240	227	243	376	---	224	---	---	---	---	219	---
Mar.	239	226	242	372	151	222	201	196	240	---	220	---
Apr.	240	226	242	373	---	---	---	195	---	153	223	421
May	240	227	240	373	---	---	---	---	---	---	227	---
June	237	220	237	325	151	222	202	202	239	---	---	---
July	236	220	235	324	---	222	---	---	---	---	---	418
Aug.	237	221	240	322	---	---	---	---	---	---	---	---
Sept.	235	219	242	300	151	222	203	203	241	154	224	---
Oct.	233	217	237	293	---	---	---	---	---	---	---	412
Nov.	231	215	234	282	---	---	---	---	---	---	---	---
Dec.	229	213	234	262	151	222	203	206	241	---	---	---
1953												
Jan.	233	214	232	275	---	223	---	---	---	---	---	425
Feb.	231	210	228	265	---	---	---	---	---	---	213	---
Mar.	231	211	227	266	---	---	---	---	---	---	210	---

1/ Simple average of quarterly indexes seasonally adjusted.

Note: For a list of items included in this table see "Agricultural Prices," Bureau of Agricultural Economics, September 30, 1952.

THE FARM COST SITUATION

Approved by Outlook and Situation Board, April 7, 1953

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GENERAL SITUATION

With prices received by farmers for most farm products at a substantially lower level in 1953 than in 1952 and cost rates to farmers only slightly lower, the cost-price squeeze in agriculture this year is more severe than in 1952, and net farm income is expected to be lower. Prices received by farmers in the first three months of 1953 averaged 9 percent below the comparable quarter in 1952 and 10 percent above the pre-Korean level (first half of 1950).

Prices paid for commodities and services used in farm production, including interest, taxes and wage rates in the first quarter of 1953 averaged about 3 percent below the same quarter a year ago but were still about 14 percent above the average for the first half of 1950 (preKorea). The decline from a year ago was due mainly to a drop in prices of feed and of feeder and replacement livestock. Prices paid by farmers for motor supplies, motor vehicles, and building and fencing materials generally have remained unchanged during the past year. Those for farm machinery, farm supplies, and fertilizer, tax rates and wages paid to hired labor have increased slightly.

Prices paid for items used in production including interest, taxes and wage rates probably will average somewhat lower for 1953, as a whole, than in 1952 (fig. 1). Prices of feeder and replacement livestock may continue at about current levels during the next few months and then decline seasonally. Feed grain prices may strengthen some in the next 2 or 3 months. After that time prospects for the 1953 crop will largely determine the level of prices. Prices farmers pay for other production items are not expected to change greatly from 1952 levels.

Costs and returns prospects in 1953 will differ greatly according to location and type of farm. Costs will continue about at 1952 levels on most types of farms, although some reduction in expenditures will result on those types of farms that make large purchases of feed and livestock. Reductions in net returns will be greatest on those farms whose commodities have had greatest price reductions from 1952, such as beef cattle. Total costs as well as gross income depend upon the scale of production as well as on the level of prices paid and prices received. At prospective cost-price relationships for 1953, farmers in most areas are likely to continue production at relatively high levels.

Farm laborers and supplies of practically all items and materials used in farm production are expected to be adequate to meet needs for 1953. Farm wage rates in 1952 averaged about 7 percent above 1951 and a little over 4 times the prewar (1935-39) average. A slight increase in farm wage rates and a further decrease in the supply of farm labor are expected in 1953. Farmers in some areas may find it difficult to obtain dependable and experienced help and to get some seasonal jobs done on time.

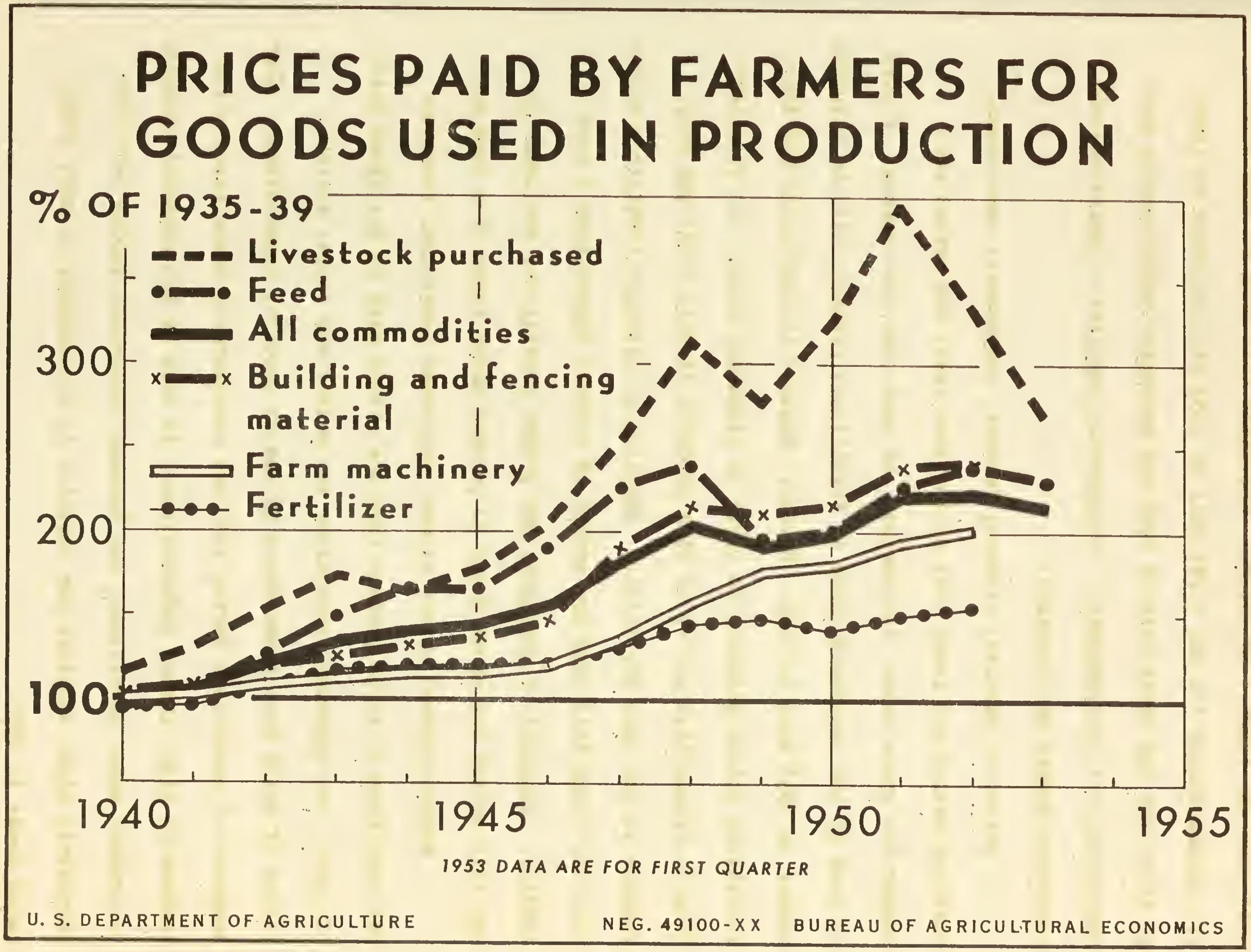
PRICES PAID BY FARMERS FOR GOODS USED IN PRODUCTION
% OF 1935-39
Livestock purchased
Feed
All commodities
Building and fencing material
Farm machinery
Fertilizer
300
200
100
1940
1945
1950
1955
1953 DATA ARE FOR FIRST QUARTER
U. S. DEPARTMENT OF AGRICULTURE
NEG. 49100-XX
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FIGURE I

Inventories of motor vehicles and machines on farms January 1, 1953 were the largest on record. Materials allocated to farm machinery manufacturers for the first half of 1953 will be about as large as those for the first half of 1952 and generally sufficient to meet manufacturers' requirements. Consequently supplies of machinery and equipment should be plentiful.

Prices of alfalfa, clovers, fescues, ryegrasses, seed wheat, oats and barley are lower this spring than last, but prices are higher for grass seeds, lespedezas, and seed corn this spring. Prices of some of the important kinds of fertilizers probably will be slightly higher in 1953 than in 1952. However, dealers in some areas may lower fertilizer prices slightly in order to stimulate sales. In relationship to prospective prices of farm products it will still pay many farmers to use more fertilizer. Supplies of nitrogen fertilizer available for crops this year are around 16 percent higher than a year earlier. Supplies of phosphate and potash fertilizers available for use this season are about 8 and 10 percent above those of a year ago.

Manufacturers' prices of many important pesticidal chemicals are down from 10 to 50 percent from the prices paid in the first half of 1952. Two important exceptions are sulfur and copper sulfate, prices of which have risen about 15 and 25 percent, respectively. Consumption of pesticides during 1952 was considerably below expectation because of light insect infestations. In view of the expanded capacity to produce major pesticides, and because carry-over stocks were comparatively high, supplies are expected to be adequate to meet anticipated needs in 1953.

Farm Labor

A slight increase in farm wage rates and a further decrease in the supply of farm labor are in prospect for 1953.

Average wage rates paid by U. S. farmers in January this year were about 3 percent higher than a year ago. This is the smallest increase of any year since the Korean hostilities began. January wage rates were less than 1 percent higher than a year earlier in some parts of the country. Farm wage rates for this year as a whole are expected to be only slightly higher than last year. Among areas and during different seasons the rise will vary depending on the extent of net losses of farm workers to industry and the Armed Forces, on changes in the demand for labor, and on prices received for farm products.

Around one percent fewer workers were employed on farms during the first two months of this year than a year ago. For the same months the drop from 1951 to 1952 was about 2.5 percent. This also approximated the decrease in average annual farm employment from 1951 to 1952 (table 1).

During certain periods in 1953 farmers in some areas will have the usual problems in getting their work done well and in good season. Throughout most of the country the supply of skilled and experienced year-round workers is expected to continue tight. Generally, however, the supply of labor is expected to be sufficient to maintain farm production at high levels. In the past, farm production has increased despite a fairly steady reduction in quantity of labor used (Figure 2-Farm Output and Labor Input). This has been achieved by greater use of mechanical power and other technological developments in farming. The higher skills required by this advanced stage of farm mechanization make it important to maintain an adequate force of experienced and dependable year-round workers on farms.

The decline in farm labor supply from 1952 is not expected to be large. Opportunities for non-farm employment will continue to attract workers to industry because of comparatively high wage rates and other considerations. Estimates of the Department of Commerce indicate that non-farm employment in February of this year was the highest of any February on record. It is difficult to estimate the net change in agricultural workers that will result from the Armed Forces rotation program in 1953.

Greater use of machines, more custom work or additional exchange of labor among neighbors in many instances have helped fill the gap left by workers who leave the farm to enter the Armed Services or take non-farm jobs. Workers from foreign sources are expected to be available for seasonal work in areas where the supply of domestic workers is inadequate.

Table 1.- Farm wage rates and related data, United States, 1935-39 average and 1940-52

(Index numbers, 1935-39 = 100)

Period or year	Farm employment			Man-hours of farm work 2/	Farm output 3/		Gross farm income per man-hour 4/	Farm wage rates 5/
	Total 1/	Family 1/	Hired		Total	Per man-hour		
1935-39	100	100	100	100	100	100	100	100
1940	100	99	103	98	110	112	107	107
1941	98	97	101	97	114	118	136	125
1942	98	97	101	101	128	127	177	163
1943	97	97	96	100	125	125	220	217
1944	95	97	88	100	130	130	232	263
1945	93	96	83	95	129	136	257	297
1946	95	98	85	93	133	143	300	320
1947	96	98	88	91	128	141	360	346
1948	95	96	91	89	138	155	374	365
1949	92	93	89	89	137	154	344	354
1950	89	90	85	83	136	164	372	351
1951	86	87	81	86	139	162	412	388
1952 6/	84	85	79	83	144	173	433	416

1/ Includes farm operators and members of their families working without wages.

2/ Total man-hours of farm work in terms of the time required by average adult male workers.

3/ Net calendar-year production for eventual human use.

4/ Because of the increase in volume of output and the increase in the price of farm products, gross farm income per man-hour has increased at about the same rate as have farm wage rates from the prewar years of 1935-39 to 1952.

5/ Simple average of quarterly indexes seasonally adjusted.

6/ Preliminary.

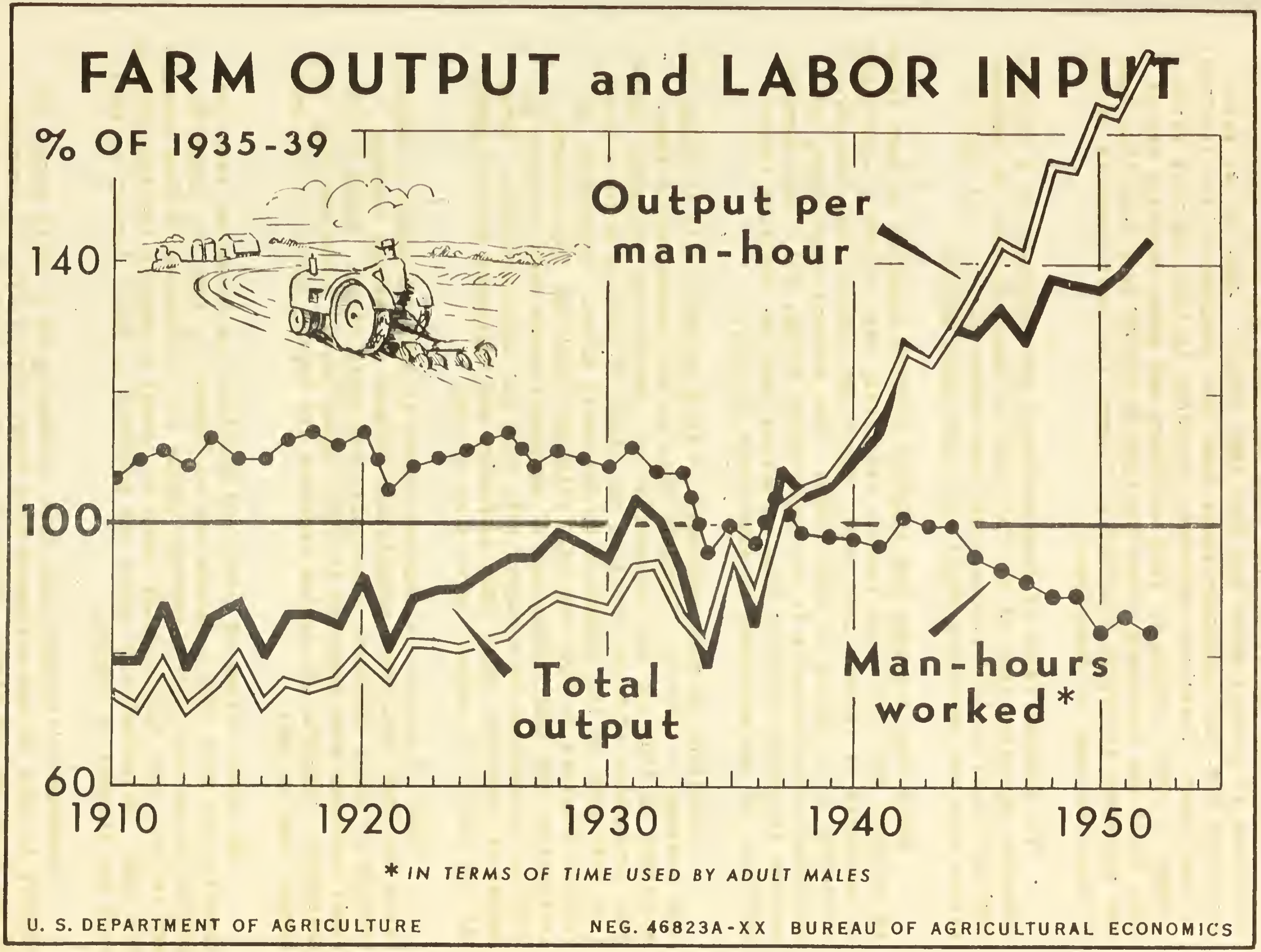
FARM OUTPUT and LABOR INPUT
% OF 1935-39
140
100
60
1910
1920
1930
1940
1950
Output per man-hour
Total output
Man-hours worked*
* IN TERMS OF TIME USED BY ADULT MALES
U. S. DEPARTMENT OF AGRICULTURE
NEG. 46823A-XX BUREAU OF AGRICULTURAL ECONOMICS

FIGURE 2

Farm Power and Machinery

Wholesale prices of both farm machinery and motor vehicles are now about 12 percent above the June 1950 prices. Most of the price increases for farm machinery since June 1950 occurred in the last half of that year. There were moderate increases in 1951 but very little change in 1952. Prices of farm machinery and motor vehicles are at a high level but increases since the 1935-39 period have been less than the increases in prices received by farmers for their products or the increase in wages of farm labor.

The present value of farm machinery and equipment on a typical 160-acre hog-dairy farm in the Corn Belt is about $6,000. To replace this machinery at 1953 prices would cost about $12,000. At 1935-39 prices this new machinery would have cost about $6,000.

Large crop acreages and slightly shorter supplies of farm labor in prospect for 1953 would favor a relatively high volume of purchases of machinery by farmers this year. There are indications, however, of a slowing up in buying of some items. Also drouthy conditions, unfavorable crop prospects in the major wheat areas, and a much greater decline in prices received than in prices paid may restrict farmers' purchases of new machinery in some areas in 1953.

Production of farm machinery in 1953 probably will be below the high average of 1948-52. Complete data on the production of farm machinery in 1952 are not yet available. Preliminary estimates indicate production of wheel tractors was about 25 percent below that of 1951 with most of the reduction in the small sizes. Production of crawler tractors in 1952 was only slightly below the 1951 record. Indications are that production of machinery other than tractors in 1952 was maintained at a higher rate than for wheel tractors. Total output of tractors, other farm machinery and equipment in 1952 probably was around 10 percent below that of 1951.

Value of exports of farm machinery in 1952 was about 5 percent below the high 1951 level principally because of smaller foreign takings of wheel tractors, especially the small sizes. About 57,000 wheel tractors were exported in 1952, about 30,000 below the high 1951 shipments. Exports of crawler tractors and repair parts in 1952 were larger than in 1951.

The total volume of power and machinery on farms has been increasing for more than a decade and on January 1, 1952 was about 84 percent above the 1935-39 average (table 2). Purchases of farm machinery in 1952 were sufficiently large to permit a further increase during the year. Inventories of power and machines on farms January 1, 1953 were the largest on record.

Numbers of tractors have been increasing at a rapid rate. On January 1, 1952 it was estimated that there were 4,170,000 tractors of all types on our farms. At the beginning of 1953 it appears that there were about 4.4 million tractors on farms, three and one-third times the 1935-39 average.

Table 2.- Farm Power and machinery and related data, United States, 1935-39 average and 1940-52

(Index numbers 1935-39 = 100)

Year or period	Number on farms, January 1 1/						Volume on farms, January 1 2/		Gross farm income calendar year 3/	Prices received by farmers
	Horses and mules all ages	Work stock 3 years old and over	Colts under 1 year of age	Trac-tors	Auto-mobiles	Motor-trucks	All machinery and equipment other than tractors and other motor vehicles	All farm power (including work animals) machines and equipment		
1935-39	100	100	100	100	100	100	100	100	100	100
1940	92	89	101	124	106	108	118	106	105	93
1941	90	87	98	135	111	113	126	109	132	115
1942	87	84	85	152	120	119	141	116	179	148
1943	84	83	69	169	112	132	158	121	220	179
1944	80	81	62	178	107	142	162	121	232	183
1945	76	77	54	195	106	153	178	126	244	193
1946	71	73	42	206	109	159	197	131	279	219
1947	64	67	35	220	112	175	219	137	328	257
1948	59	62	31	240	108	195	252	147	333	266
1949	54	57	28	266	110	212	236	158	306	233
1950	49	52	23	291	108	227	310	166	309	239
1951	45	48	19	317	110	237	337	175	354	282
1952	40	42	16	335	112	248	366	184	359	269
1953 4/	36	38	15							

1/ The 1935-39 average was for horses and mules all ages, 15,750,000 head; for workstock 13,700,000 head; for colts 744,000 head; for tractors 1,244,000; for automobiles 3,896,000; and there were 973,000 motortrucks.

2/ In terms of 1935-39 prices.

3/ Includes Government payments.

4/ Preliminary.

The increase in the total volume of power and machinery on farms has taken place while the horse and mule population has been decreasing sharply. On January 1, 1953 there were about 36 percent as many horses and mules on farms as in 1935-39.

Demand for workstock has been declining and prices in recent years have been low. There have been continuous and heavy reductions in the size of the colt crop. In 1952 only 113,000 colts were raised, the smallest crop in more than a century and only 5 percent as large as the average colt crop at the beginning of World War I. Only 5.6 million head of horses and mules of all ages were on farms on January 1, 1953.

About 93 percent were work animals (3 years and over). This number of work animals is about one-fourth of the peak number of 1923 and about 38 percent of the 1935-39 average. A relatively high percentage of horses and mules now on farms are kept primarily for purposes other than field work.

Feed

Stocks of feed grains on January 1 were up 2 percent compared with a year earlier, and the carry-over this fall probably will be up 20-25 percent from last year. Fifteen percent more beef cattle on feed, 11 percent fewer fall pigs being marketed, 15 percent fewer spring pigs expected to be farrowed, 3 to 4 percent fewer chickens in laying flocks, probably more farm chickens and broilers and fewer turkeys to be raised add up to about 2-3 percent fewer grain-consuming livestock for the feeding year beginning last October.

Prices received by farmers for feed grains and hay in March 1953 averaged about 9 percent below those of a year ago (table 3). Corn, oats, barley, and hay were lower in price than a year ago. Sorghum grains were higher.

Prices paid by farmers for most byproduct feeds and commercial mixed feeds were lower in March 1953 than a year ago. The average value of the poultry ration was 6 percent below March 1952, and the value of the concentrate ration fed to milk cows in milk selling areas was 5 percent less than a year ago. The index of prices paid by farmers for all feed was 6 percent less. Prices probably will continue below those of a year ago through the first half of 1953. Prospects for 1953 feed grain crops will become important in influencing prices in the late spring and summer.

Prices received by farmers for all livestock and livestock products on March 15 averaged 12 percent below March a year ago. Prices of hogs and eggs were higher, but the price of beef cattle was down 36 percent, lambs 21 percent, butterfat about 14 percent, milk 10 percent and wool 3 percent.

Compared with a year ago returns per dollar of feed cost are higher for hogs, eggs and broilers and lower for milk, butterfat, beef cattle and sheep. Despite the drop in the price of beef cattle, beef still gives above average returns per $1.00 of feed (table 4). However, returns per $1.00 of feed cost for cattle feeders in 1951-52 were only equal to the 1935-39 average and below the 1947-49 average. Returns for 1952-53 probably will be below average. Butterfat dairying with March prices gave the lowest return of any livestock enterprise in relation to 1935-39. Returns have been below average for hogs for the past two years, but now are above average.

Table 3.- Average prices of feeds in the United States, March 15, 1953 with comparisons

Item	Unit	March 15, 1951	March 15, 1952	Sept. 15, 1952	March 15, 1953
Prices received by farmers					
Corn	Bushel	$ 1.60	$ 1.65	$ 1.71	$ 1.46
Oats	do.	.92	.89	.84	.78
Barley	do.	1.34	1.36	1.43	1.32
Sorghum grain	Cwt.	2.12	2.52	3.02	2.66
Hay, baled	Ton	23.10	25.10	25.00	24.40
Feed grains and hay, Index number (1935-39 = 100)		232	241	246	219
Prices paid by farmers					
Mixed dairy feed 16%	Cwt.	4.07	4.43	4.37	4.18
Laying mash	do.	4.92	5.29	5.35	5.00
Broiler mash 1/	do.	5.43	5.74	---	5.34
Cottonseed meal	do.	4.89	5.06	5.33	4.95
Soybean meal	do.	4.75	5.37	6.08	4.91
Linseed meal	do.	4.55	5.01	5.43	5.27
Meat scrap	do.	6.56	6.56	6.73	5.48
Bran	do.	3.31	4.02	3.77	3.62
Middlings	do.	3.47	4.09	3.96	3.66
Alfalfa hay, baled	Ton	34.10	39.10	37.60	38.50
Prices paid by farmers for feed, Index number (1935-39 = 100)		224	242	242	227
Average value of concentrate ration fed to poultry and milk cows 2/					
Fed to poultry	Cwt.	4.00	4.24	4.28	3.97
Fed to milk cows in milk selling areas	Cwt.	3.54	3.87	3.88	3.68
Fed to milk cows in cream selling areas	Cwt.	3.21	3.45	3.40	3.25

1/ Price of chick starter mash used in this table before 1953.

2/ Value of the corn, oats, oil meal, millfeed, commercial mixed feed, etc., making up 100 pounds of "grain" ration.

- - - -

With most livestock enterprises giving below average returns in relation to feed prices, special attention should be given by livestock producers to use of practices that reduce costs.

Table 4.- Returns per $1.00 of feed cost of livestock enterprises, United States, March 15, 1953, with comparisons 1/

Livestock enterprise or product	1935-39 average	1947-49 average	March 15, 1951	March 15, 1952	Sept. 15, 1952	March 15, 1953
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Eggs	1.72	1.68	1.56	1.14	1.62	1.61
Broilers	1.60	1.63	1.62	1.39	1/	1.51
Milk	1.92	1.92	1.94	1.94	1.98	1.74
Butterfat	1.55	1.42	1.40	1.61	1.52	1.37
Hogs	1.50	1.65	1.64	1.24	1.36	1.69
Sheep	1.44	1.41	2.64	1.49	1.40	1.33
Beef	1.39	1.74	2.53	2.21	1.88	1.52
Cattle feeding 2/	1.21	1.49	1951-52 1.22		1952-53 3/	
	(Index numbers 1935-39=100)					
	Percent	Percent	Percent	Percent	Percent	Percent
Eggs	100	98	91	66	94	94
Broilers	100	102	101	87	1/	94
Milk	100	100	101	101	103	91
Butterfat	100	92	90	104	98	88
Hogs	100	110	109	83	90	113
Sheep	100	98	183	103	97	92
Beef	100	125	182	159	135	109
Cattle feeding 2/	100	123	1951-52 100		1952-53 3/	

1/ The following quantities of feed were used in calculating feed cost: 7 pounds of poultry ration per dozen eggs; 4½ pounds of chick starter per pound of broiler in 1935-39. In 1951 and 1952, 3½ pounds of chick starter and in 1953, 3½ pounds of broiler mash. No prices available on broiler mash before 1953. 7½ bushels of corn plus 20 pounds of soybean meal per 100 pounds of hogs; 30 pounds of concentrate ration fed to milk cows in milk selling areas plus the value of 110 pounds of hay, per 100 pounds of milk; 7½ pounds of concentrate ration fed to milk cows in cream selling areas plus the value of 27.5 pounds of hay in Minnesota and Iowa, per pound of butterfat; 3 bushels of corn plus 600 pounds of hay per 100 pounds of beef cattle; 2 bushels of corn plus 1,500 pounds of hay per 100 pounds of sheep and lambs. It was assumed that for each 100 pounds of sheep and lamb produced 20 pounds of wool was produced from the same feed. The quantity of hay for milk cows, beef cattle and sheep includes an allowance for silage and pasture. It was assumed that the feed nutrients from pasture would cost 1/4 as much per pound as they would if obtained from hay.

2/ Based on table 6, Livestock and Meat Situation, Sept.-Oct., 1952. Designed to represent average feeding experience in the Corn Belt.

3/ Season not completed.

Seeds

Farmers are paying lower seed prices this spring than last for alfalfa, clovers, fescues, ryegrasses, seed wheat, oats, and barley according to early season reports. Sharpest declines in prices from last year have occurred for tall fescue, alfalfa, and Ladino clover. On the other hand prices are higher than a year earlier for most of the grass seeds, lespedeza, and seed corn. Advances are greatest for lespedezas and late forage crop seeds, such as the millets except Japanese, Sudangrass, and the sorgos ("canes").

Production in 1952 of the 29 seed crops for which the Bureau of Agricultural Economics made estimates totaled 968 million pounds, 25 percent larger than in 1951 and 10 percent above the 1941-50 average. Imports of these seeds from July 1, 1952 through February, 1953, totaled 66.4 million pounds, were a third larger than during the same period a year earlier and nearly 2½ times the 1941-50 average. But the carry-over of these seeds into the 1952 crop year, totaling 531 million pounds, was about a seventh smaller than a year earlier. However, it was nearly three times the 1941-50 average which includes 7 out of 10 years in which the carry-over of Austrian Winter peas and lupine was only a small fraction of the record 1951 and 1952 carry-overs.

With increased production and imports more than offsetting the smaller carry-over, the supply of more than 1.5 billion pounds of the 29 legume and grass seeds for planting during the 1952-53 season is 9 percent larger than for the preceding season and 43 percent above the 1941-50 average. The supply of each of the legumes, except lespedeza and purple vetch, is above average, but the supply of such grasses as timothy, redtop, crested wheatgrass, and Sudangrass seed is much below average, and also about a fifth to a third smaller than a year ago. Except for these four seeds, lespedeza, and some of the late forage crop seeds, there seems to be enough seed to take care of expected requirements and still leave larger than average carry-overs of most kinds.

Fertilizer

Prices of fertilizer to farmers in the spring of 1953 probably are a little higher than last fall although wholesale prices for some items remain unchanged. Wholesale prices for ammonium sulfate and for superphosphate are up 10 and 7 percent over last spring. Wholesale prices for mixed fertilizers are around 2 percent higher than a year ago. The increased freight rates on fertilizer prices to farmers were reflected in retail prices for fertilizer last fall, so that prices in the spring of 1953 should generally show little change.

Operation of typical 160-acre southern Piedmont cotton farms growing about 15 acres of cotton, 16 acres of corn and 10 acres each of small grain and hay used about 10.7 tons of fertilizer in 1952 at a cost of about $450. In 1940 this quantity of fertilizer would have cost about $260. In 1953 it probably will cost the farm operator about $470.

Revised estimates of supplies of nitrogen (N) phosphoric oxide (P_2O_5) and potash (K_2O) available for use during the year ending June 30, 1953 indicate an aggregate increase of approximately 11 percent over the supply available the previous year.

Nitrogen (N): The supply available for the year 1952-53 is estimated at 1,660 thousand tons of nitrogen, 16.5 percent above the 1,425 thousand tons reported as available last year. Current indications are that available supplies will be about 4.7 percent above the estimates made last fall. Nitrogen solutions probably will comprise about 36 percent of the total for 1952-53, compared with about 35 percent last year.

Phosphoric oxide (P_2O_5): Present indications are that supplies of P_2O_5 available for 1952-53 will be about 8 percent above those for 1951-52. The current estimate is that 2,410 thousand tons will be available for use as fertilizer for the year ending June 30, 1953. This does not include quantities available in the form of ground rock phosphate and other materials.

Potash (K_2O): Revised estimates indicate that supplies of K_2O for the 1952-53 season will be about 1,745 thousand tons, 10 percent above those available last year.

In contrast with fixed expenses such as taxes, interest and normal repairs and replacement, expenditures made by individual farmers for fertilizer can be varied a great deal from year to year. The question faced by the farmer is one of determining how much fertilizer to use. This depends on the value of the additional yield obtained from an additional quantity of plant nutrients and the cost of that much fertilizer.

Some estimates of response of corn to fertilizer obtained in the eastern section of the Corn Belt indicate that at current prices and costs, the most profitable rate of fertilizer application per acre averages about 175 pounds of plant nutrients, or 875 pounds of a fertilizer carrying 20 percent plant nutrients. This probably is more than 10 times the rate applied on the average acre of corn in this area.

The crop response to applications of fertilizer, of course, varies greatly from farm to farm. The farmer who is short of labor will be interested in the estimate that at the most profitable rate of application, the yield of corn per hour of man labor in one farming area in the eastern Corn Belt is about 3 times as large as where no fertilizer is applied. This is a broad average. Based on the estimated average yield response and on surveys of production costs, a net return of $35 per acre above all costs of producing corn in one farming area in the Corn Belt would be obtained if 70 pounds of plant nutrients were applied. But production costs vary among individual farmers. For example, if the total production cost per acre of corn were $10 higher than in the instance just related, an application of 130 pounds of plant nutrients would be needed to obtain net returns of $35 per acre. When fixed costs are high it is important to give particular attention to practices that increase yields. In many areas a higher rate of application of fertilizer on a somewhat smaller acreage of corn and use of fertilizer as needed to establish more improved hay and pasture would reduce the cost of feed production and increase net incomes.

Building Materials, Supplies and Containers

There has been almost no change in the average price of farm building materials in the last 2 years. The last change of any consequence occurred shortly after the outbreak of the Korean War when prices paid by farmers for building materials increased 12 percent in less than a year. Since March 1951 these prices have remained at or near the record high level of almost two and two-thirds times 1940.

These cost estimates are based on changes in the cost of a bill of materials for a typical poultry house large enough for 200 hens. At U.S. average prices, these materials (exclusive of sand and gravel) would have cost $304 in 1940, $717 in June 1950, $801 in March 1951, and $803 in December 1952. Between March 1951 and December 1952 the cost of this bill of materials varied between $798 and $803.

Prices paid by farmers for building materials were slightly lower in mid-February than a month earlier but strengthened a little during March. The dollar volume of all construction put in place in January and February was 5½ percent above a year earlier.

The cost of fencing materials was higher in December 1952 than ever before. Prices increased more than 4 percent in the last half of 1952 largely as a result of the increase in the price of steel. The cost of materials for a mile of fence consisting of 32-inch woven wire, two strands of 4-point barbed wire with alternate steel and wood posts set one rod apart and with 2 galvanized gates was not more than $300 in 1940. These same materials would cost $700 today. To build a mile of cheaper fence comprised of four strands of barbed wire now requires an outlay of $480 for materials compared with less than $200 before World War II.

Prices paid by farmers for farm supplies including containers are at record high levels. In December, they were more than 5 percent higher than a year earlier, and 98 percent higher than in 1940.

Supplies of building materials, fencing materials, supplies and containers are expected to be adequate to meet needs in 1953.

Pesticides

Manufacturers' prices of many important pesticidal chemicals have been reduced substantially from those of the first half of the 1952 season. Prices of most pesticides remained unchanged after the removal of price controls on March 5. Notable exceptions were the prices of copper sulphate and sulphur which rose about 15 and 25 percent, respectively. However, compared with the first half of 1952, prices of DDT were down nearly 50 percent, BHC 33 percent, aldrin 32 percent, toxaphene 26 percent, and allethrin 25 percent. Prices of several other pesticides were down from 10 to 16 percent.

Supplies of pesticides are expected to be adequate to meet anticipated needs during 1953. During 1951 and 1952, facilities for producing the major synthetic organic pesticides were greatly expanded. Large stocks of some important insecticides, such as DDT and benzene hexachloride, were carried over at the end of the 1952 season. Consumption during 1952 was smaller than expected largely because of the prolonged drought over a large part of the country which reduced the need for control measures against a number of major insect pests. Sulfur supplies for grinding for use as a fungicide and an insecticide are expected to be adequate during 1953 in view of the more widespread use of the synthetic organic fungicides and miticides. Supplies of copper sulfate and other copper fungicides are expected to be adequate for agricultural needs during 1953. Carry-over stocks of herbicides (weed killers) appear to be about normal, and production is being increased to meet the growing demand.

Exports of pesticides have increased rapidly in recent years. These exports, particularly those to countries in the Southern Hemisphere, have tended to level off the seasonal nature of the domestic demand. Although the foreign demand for pesticides is a source of competition for available supplies, exports have helped farmers in the United States by tending to maintain an industry capable of meeting maximum domestic needs.

Farm Land Values and Rentals

The general advance in farm real estate values that followed the Korean outbreak in July 1950 was largely checked by mid-1952. Prices of farm land rose an average of 24 percent during this 2-year period, and the national index reached 213 (1912-14=100) as of July 1, 1952. This was a new record high, 20 percent above the previous postwar peak reached in November 1948, and 25 percent above March 1920.

Farm real estate values remained essentially unchanged during the 4 months ending November 1, 1952. Only 11 States showed changes of 2 percent or more, with about an equal number showing increases and decreases. The United States index remained at 213 (1912-14=100), the same as in July and only 3 percent above a year earlier.

Regionally, the small changes in values were mainly associated with crop conditions and the trends in prices of the major farm commodities of the area (table 5). This was apparent especially in several southwestern States where the extended drought had reduced crop and pasture yields. The steady decline in prices of meat animals was also reflected in slightly lower prices for grazing lands in the western range States. Land values remained firm to slightly higher in the Southeast, however, as industrial expansion continued and small tracts and farms are in demand for factory sites and part-time farms.

Table 5.- Farm Real Estate: Index numbers of average value per acre and percentage change 1/

Geographic division	Index numbers (1912-14 = 100)				Increase during year ending		Change during 4 months ending	
			1952					
	1950	1951	Mar.	Nov.	Nov. 1951	Nov. 1952	Nov. 1951	Nov. 1952
					Percent	Percent	Percent	Percent
New England	158	163	169	172	3	2	1	-1
Middle Atlantic	157	172	190	193	13	4	2	2
E. North Central	166	194	211	215	15	5	2	0
W. North Central	141	163	178	178	14	3	2	0
South Atlantic	228	255	284	292	15	7	2	1
E. South Central	264	298	327	327	15	2	2	-1
W. South Central	191	225	253	251	17	5	2	-2
Mountain	156	176	188	193	18	1	2	-1
Pacific	180	199	213	217	13	0	3	2
United States	169	193	211	213	15	3	2	0

1/ All farm land with improvements as of March 1 except as indicated.

The volume of farm sales during 1952 was probably at a new postwar low as investment demand slackened and prospective buyers became more hesitant to close deals in view of price uncertainties. Farm listings were also at a low level in most areas as present owners were hesitant to sell as long as their investments continued to yield returns comparable with alternative investments. Thus, available farms in many areas are limited to estate settlements, retirements and similar situations where the owners are forced to sell.

Gross rents paid for leased farm lands in 1952 were at a new record high as both cash and share rents advanced. Rents paid on farms rented on a livestock share basis were down slightly because of lower prices for livestock and livestock products. Total gross rents paid in 1952 for all methods of renting amounted to $3,379 million, about 2 percent above 1951. Landlords' expenses also advanced, however, mainly because of the general increase in farm real estate taxes and increased costs for maintaining buildings. As a result, net rents were about the same as in 1951, but the rate of return on the investment was a little lower because of the increase in the market value of farm property.

Cash rents for hay and pasture lands in 1953 may be a little lower than in 1952 in some areas because of drought and poor pasture conditions prevailing in 1952. Rental shares for major crops change slowly, however, but the total value of the crops paid as rent are likely to be lower because of somewhat lower prices.

Interest, Taxes, and Insurance

Interest payments - Farmers paid about 8 percent more interest on farm-mortgage debt in 1952 than in 1951. In 1953 it is expected that farm-mortgage interest charges may increase by about the same percentage over 1952. The increase in farm-mortgage debt caused the rise in interest payments. On January 1, 1953 this debt was estimated at $6.8 billion which compares with $6.3 billion a year earlier.

Interest rates on farm-mortgage debt at the beginning of 1953 averaged 4.7 percent - the same as a year earlier. The Federal land banks charged an average of 4.1 percent, life insurance companies 4.4 percent, and other lenders 5.0 percent. There was no substantial change in the distribution of farm-mortgage debt by lenders in 1952, and all active lenders showed substantial increases in their holdings of farm-mortgage debt.

Interest paid by farmers on non-real-estate debt, excluding price support loans, was at a record level in 1952 - approximately 10 percent higher than in 1951 and 166 percent higher than in 1945. In early 1953, however, there were indications that the rise in non-real-estate interest payments, which has been sharp and continuous since the war, may have ended. The volume of debt, which chiefly determines the amount of interest paid, apparently is now leveling off and may actually decline in 1953. Interest rates have risen slightly during the past several years but they are not expected to change significantly this year.

The decline in livestock prices which has reduced the capital outlay to buyers has been an important factor in slowing down the use of non-real-estate credit. In sections of the Midwest, non-real-estate debt at the beginning of 1953 was already below the levels of a year earlier.

Taxes - Property taxes levied on farm real estate and personal property by State and local governments are expected to rise again this year. Preliminary indications are that such taxes levied in 1952 and payable largely in 1953 will average 4 or 5 percent higher than in the preceding year. It is likely that farm real estate levies will set a new all-time record.

The impact of farm property taxes is particularly important when net farm income is declining since these taxes are a relatively fixed charge against farmers' assets. Local governments, particularly those in rural areas, continue to rely heavily upon these taxes as a source of revenue, and some State governments also obtain a large amount of revenue from them. In 1952, property taxes paid on a typical 160-acre hog-dairy farm in the Corn Belt were $378, and a further increase to about $400 is expected for 1953. Personal property on this farm on January 1, 1953 consisted of 16 milk cows, 14 other cattle, 62 hogs and pigs, 133 chickens, about $4,000 worth of grain and roughage and $6,000 worth of machinery and equipment. In 1940, taxes on this real and personal property would have been around $170, or about 43 percent of 1953 taxes.

Legislatures in 44 States meet in regular session in 1953. In many of these States, new taxes are being added or higher rates applicable to existing taxes are being imposed. However, in a few cases present taxes are being abandoned, or existing rates lowered. Higher gasoline taxes became effective in January in Illinois and Massachusetts. Few changes are presently indicated in State income taxation in 1953.

Insurance - Premiums and assessments paid by farmers to farm mutual insurance companies probably will be higher in 1953 than in either 1952 or 1951. The increased insurance costs of farmers are due to increases in insurance carried, rather than to increases in rates charged. The assessment rates paid by farmers to farm mutual fire insurance companies averaged about 26.1 cents per $100 of insurance in 1952, compared with 26.7 cents in 1951. About $76 million in premiums and assessments were paid to these companies in 1952 - most of it by farmers.

In recent years, the safety funds (reserves) of farm mutual fire insurance companies have increased at a faster rate than has their insurance. This means that farmers' assessment rates are being increasingly stabilized, thus reducing the probabilities that extra or larger assessments will be necessary in any year.

Federal crop insurance was offered in 874 counties in 1952. About 346,000 farmers were insured and premiums paid amounted to more than $21 million. Approximately 45,000 indemnity payments were received by farmers, amounting to more than $20 million. Premiums paid were more than indemnities received with respect to all crop insurance programs except the one on multiple crops.

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Preliminary reports indicate that farmers paid about $63 million as hail insurance premiums in 1952, for more than $1.5 billion of insurance on growing crops--more than in any prior year. Farmers received about $33 million in loss payments because of hail damage to their crops.